Cornelia Caragea

Contact Information

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Research Interests

Artificial Intelligence, Machine Learning, Information Retrieval, Natural Language Processing, Privacy Analysis, and Social Network Analysis.

Education

- Aug 2003 Dec 2009: Ph.D. in Computer Science, Artificial Intelligence Research Laboratory, Iowa State University, Ames, IA, USA.
- Oct 1992 Jul 1997: B.S. in Computer Science, Faculty of Mathematics and Computer Science, University of Bucharest, Bucharest, Romania.

Professional Experience

- Sept 2017 present: Associate Professor and The Lloyd T. Smith Creativity in Engineering Chair, Computer Science, Kansas State University, Manhattan, KS, USA.
- Sept 2012 Aug 2017: Assistant Professor, Computer Science and Engineering, University of North Texas, Denton, TX, USA.
- Jul 2010 May 2012: Post-Doctoral Research Associate, Intelligent Information Systems Laboratory, College of Information Sciences & Technology, Pennsylvania State University, University Park, PA, USA.
- Jan 2010 Jun 2010: Post-Doctoral Research Associate, Artificial Intelligence Research Laboratory, Iowa State University, Ames, IA, USA.
- Jun 2006 Dec 2009: Research Assistant, Computer Science, Iowa State University, Ames, IA, USA.
- Aug 2003 May 2006: Teaching Assistant, Computer Science, Iowa State University, Ames, IA, USA.

Research Projects

The design of accurate approaches for information extraction and scientific data analysis, which can foster knowledge discovery and organization; the development of supervised and semi-supervised learning approaches to handle todays very large collections of data from many data mining applications; the design of privacy analysis technologies that can help users to maintain control of their privacy in online environments, while allowing users to increase their online social capital without leading to overexposure; the investigation of accurate approaches to establishing trustworthy-citizen-created data for disaster response and humanitarian action, which can potentially improve the speed, quality and efficiency of emergency response during critical times of disaster events; and the design of AI technology to analyze social support in online health communities.

- 1. NSF IIS 1741353: Big Data: "BIGDATA: IA: Collaborative Research: Domain Adaptation Approaches for Classifying Crisis Related Data in Social Media." NSF, Big Data Science & Engineering Program, and Amazon Web Services. **Cornelia Caragea** (PI). Award amount: NSF: \$400,000 + AWS: \$384,458. [Awarded].

 January 1, 2018 December 31, 2021.
- IMLS: "Programmatic Extraction of 'Documents' from Web Archives." The Institute of Museum and Library Services (IMLS). Mark Phillips (PI); Co-PI: Cornelia Caragea. Award amount: \$318,989.
 [Awarded]. December 1, 2017 - November 30, 2019.
- 3. NSF IIS 1652674: III: "CAREER: From Data to Knowledge: Extracting and Utilizing Scholarly Knowledge Graphs." NSF, Division of Information & Intelligent Systems. Cornelia Caragea (PI). Award amount: \$499,876. [Awarded].

 June 1, 2017 May 31, 2022.
- 4. NSF IIS 1526542: CHS: Small: Collaborative Research: "Automating Relevance and Trust Detection in Social Media Data for Emergency Response." NSF, Division of Information & Intelligent Systems. Cornelia Caragea (PI). Award amount: \$250,000. [Awarded]. September 1, 2015 August 31, 2018.
- 5. NSF CMMI 1541155: "CRISP Type 2: Collaborative Research: Resilience Analytics: A Data-Driven Approach for Enhanced Interdependent Network Resilience." NSF, Division of CMMI. Andrea H. Tapia (PI); Co-PIs: Cornelia Caragea, Christopher Zobel and Jessica Kropczynski. Award amount: \$927,171. KSU share: \$224,897. [Awarded].

 October 15, 2015 October 14, 2018.
- 6. NSF IIS 1423337: III: Small: Collaborative Research: "Keyphrase Extraction in Document Networks." NSF, Division of Information & Intelligent Systems. **Cornelia Caragea** (PI); Co-PI: Paul Tarau. Award amount: \$324,866. [Awarded]. September 1, 2014 August 31, 2018.
- 7. NSF CNS 1421970: TWC: Small: Collaborative: "Towards Privacy Preserving Online Image Sharing." NSF, Division of Computer and Network Systems. **Cornelia Caragea** (PI). Award amount: \$244,736. [Awarded]. September 1, 2014 August 31, 2018.
- 8. NSF IIS 1353418: EAGER: Collaborative Research: "Establishing Trustworthy-Citizen-Created Data for Disaster Response and Humanitarian Action." NSF, Division of Information & Intelligent Systems. Cornelia Caragea (PI). Award amount: \$74,999. [Awarded]. September 1, 2013 August 31, 2015.
- 9. UNT ROP Seed Research Grant: "MetaSeer: An Automated Tool to Extract Information for Meta-Analyses." Research grant sponsored by UNT. Kim Nimon (PI); Co-PI: Cornelia Caragea, University of North Texas. Award amount: \$7,300. [Awarded]. September 1, 2013 August 31, 2014.
- 10. Lockheed Martin Corporation Research Grant: "Anomaly Detection from Social Media Streams." Research grant sponsored by Lockheed Martin Corporation. Prasenjit Mitra (PI); Co-PI: Cornelia Caragea, Award amount: \$100,000. [Awarded].

 March 2011 December 2011

Publications and Research Reports

Ph.D. Thesis: "Abstraction-Based Probabilistic Models for Sequence Classification.", 2009.

Refereed Journal Publications:

- 1. Gilad Katz, **Cornelia Caragea**, and Asaf Shabtai. "Vertical Ensemble Co-Training for Text Classification." ACM Transactions on Intelligent Systems and Technology (ACM TIST), 2018. [Accepted.]
- 2. Kishore Neppalli, **Cornelia Caragea**, Doina Caragea, Murilo Cerqueira Medeiros, Andrea Tapia, and Shane Halse. "Predicting Retweetability during Hurricane Disasters." *International Journal of Information Systems for Crisis Response and Management.* 2017. [To appear].

- 3. Hongmin Li, Doina Caragea, **Cornelia Caragea**, and Nic Herndon. "Disaster Response Aided by Tweet Classification with a Domain Adaptation Approach." *Journal of Contingencies and Crisis Management*, 2016/2017. Special Issue on Human Computer Interaction in Critical Systems. 2017. [To appear].
- 4. Kishore Neppalli, **Cornelia Caragea**, Anna Squicciarini, Andrea Tapia, and Sam Stehle. "Sentiment Analysis during Hurricane Sandy in Emergency Response." *International Journal of Disaster Risk Reduction* (IJDRR). Volume 21, Pages: 213-222, March 2017.
- 5. Shane Halse, Andrea H. Tapia, Anna Squicciarini, and Cornelia Caragea. "An Emotional Step Towards Automated Trust Detection in Crisis Social Media." *Information, Communication & Society*. DOI: 10.1080/1369118X.2016.1272618. Pages: 1-18, January 2017.
- 6. Nick LaLone, Andrea H. Tapia, **Cornelia Caragea**, Christopher W. Zobel. "Embracing Human Noise as a Resilience Indicator: Twitter as Power Grid Correlate Sustainable and Resilient Infrastructure." *The Journal of Sustainable and Resilient Infrastructure.* 2017. [To appear].
- Anna Squicciarini, Cornelia Caragea, and Rahul Balakavi. "Toward Automated Online Photo Privacy." ACM Transactions on the Web (ACM TWeb), 2017. Volume 11, Issue 1, Article 2, March 2017. Pages: 2:1 2:29.
- 8. Kash Barker, James H. Lambert, Christopher W. Zobel, Andrea H. Tapia, Jose E. Ramirez-Marquez, Laura Albert McLay, Charles Nicholson, **Cornelia Caragea**. "Defining Resilience Analytics for Interdependent Cyber-Physical-Social Networks." Sustainable and Resilient Infrastructure, 2017.
- Sujatha Das Gollapalli, Cornelia Caragea, Prasenjit Mitra and C. Lee Giles. "Using unlabeled data to improve researcher homepage classification." In: ACM Transactions on the Web, (ACM TWeb), Volume 9, No. 4, Pages: 1-32, October 2015.
- Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabsa, Cornelia Caragea, Suppawong Tuarob, Alexander Ororbia, Douglas Jordan, Prasenjit Mitra and C. Lee Giles. "CiteSeerX: AI in a Digital Library Search Engine." In: Artificial Intelligence Magazine (AI Magazine), 36(3): 35-48, 2015.
- Prakhar Biyani, Sumit Bhatia, Cornelia Caragea, and Prasenjit Mitra. "Using Non-lexical Features
 For Identifying Factual and Opinionative Threads in Online Forums." In: Elsevier Knowledge-Based
 Systems, 69: 170-178, 2014.
- 12. Sumit Bhatia, **Cornelia Caragea**, Hung-Hsuan Chen, Jian Wu, Pucktada Treeratpituk, Zhaohui Wu, Madian Khabsa, Prasenjit Mitra, and C. Lee Giles. "Specialized Research Datasets in the CiteSeerx Digital Library." In: *D-Lib Magazine*, July/Aug 2012, Volume 18, No. 7/8, 2012.
- 13. Cornelia Caragea, Adrian Silvescu, and Prasenjit Mitra. "Protein Sequence Classification using Feature Hashing." In: *Proteome Science*, 2012.
- 14. Rasna Walia, Cornelia Caragea, Ben Lewis, Fadi Towfic, Michael Terribilini, Yasser El-Manzalawy, Drena Dobbs, and Vasant Honavar. "Protein-RNA Interface Residue Prediction Using Machine Learning: An Assessment of the State of the Art." In: BMC Bioinformatics, 2012. Highly Accessed on BioMed Central website.
- Cornelia Caragea, Doina Caragea, Adrian Silvescu, and Vasant Honavar. "Semi-Supervised Prediction of Protein Subcellular Localization Using Abstraction Augmented Markov Models." In: BMC Bioinformatics 2010, Special Issue on Machine Learning in Computational Biology (MLCB 2010).
- Cornelia Caragea, Jivko Sinapov, Drena Dobbs, and Vasant Honavar. "Mixture of experts models
 to exploit global sequence similarity on biomolecular sequence labeling." In: BMC Bioinformatics 2009,
 doi:10.1186/1471-2105-10-S4-S4.
- 17. Fadi Towfic, **Cornelia Caragea**, David Gemperline, Drena Dobbs, and Vasant Honavar. "Struct-NB: Predicting protein-RNA binding sites using structural features." In: *International Journal of Data Mining and Bioinformatics* 2008.

Cornelia Caragea, Jivko Sinapov, Adrian Silvescu, Drena Dobbs, and Vasant Honavar. "Glycosylation site prediction using ensembles of Support Vector Machine classifiers." In: BMC Bioinformatics 2007, 8:438. Highly Accessed on BioMed Central website.

Refereed Conference Publications:

- Ashwini Tonge, Cornelia Caragea, and Anna Squicciarini. "Privacy-Aware Tag Recommendation for Image Sharing." In: Proceedings of the 29th ACM Conference on Hypertext and Social Media (HT 2018), Baltimore, Maryland, USA, 2018.
- Kishore Neppalli, Cornelia Caragea, Doina Caragea. "Deep Neural Networks versus Naive Bayes Classifiers for Identifying Informative Tweets during Disasters." In: Proceedings of the 15th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2018), Rochester NY, USA, 2018.
- Reza Mazloom, HongMin Li, Doina Caragea, Muhammad Imran, and Cornelia Caragea. "Classification of Twitter Disaster Data Using a Hybrid Feature-Instance Adaptation Approach." In: Proceedings of the 15th International Conference on Information Systems for Crisis Response and Management (IS-CRAM 2018), Rochester NY, USA, 2018.
- 4. Hamed Khanpour, Cornelia Caragea, and Prakhar Biyani. "Identifying Empathetic Messages in Online Health Communities." In: *Proceedings of the 8th International Joint Conference on Natural Language Processing* (IJCNLP 2017), Taipei, Taiwan, 2017.
- Anna Squicciarini, Andrea Novelli, Dan Lin, Haoti Zhong and Cornelia Caragea. "From Tag to Protect: A Tag-Driven Policy Recommender System for Image Sharing." In: Proceedings of the 15th International Conference on Privacy, Security and Trust (PST 2017), Calgary, Alberta, Canada, 2017.
- 6. Haoti Zhong, Anna Squicciarini, David Miller, and Cornelia Caragea. "A Group-Based Personalized Model for Image Privacy Classification and Labeling." In: Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI 2017), Melbourne, Australia, 2017.
- 7. Corina Florescu and Cornelia Caragea. "PositionRank: An Unsupervised Approach to Keyphrase Extraction from Scholarly Documents." In: *Proceedings of the Annual Meeting of the Association for Computational Linguistics* (ACL 2017), Vancouver, Canada, 2017.
- 8. HongMin Li, Doina Caragea, and Cornelia Caragea. "Towards Practical Usage of Domain Adaptation Algorithms in Classifying Disaster Related Tweets." In: *Proceedings of the 14th International Conference on Information Systems for Crisis Response and Management* (ISCRAM 2017), Albi, France, 2017.
- 9. Corina Florescu and **Cornelia Caragea**. "A New Scheme for Scoring Phrases in Unsupervised Keyphrase Extraction." In: *Proceedings of the* 39th European Conference on Information Retrieval (**ECIR 2017**), Aberdeen, Scotland, UK, 2017.
- Lucas Sterckx, Cornelia Caragea, Thomas Demeester, and Chris Develder. "Supervised Keyphrase Extraction as Positive Unlabeled Learning." In: Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP 2016), Austin, Texas, 2016.
- 11. **Cornelia Caragea**, Jian Wu, Sujatha Das Gollapalli, and C. Lee Giles. "Document Type Classification in Online Digital Libraries." In: *Proceedings of the Twenty-Eighth Annual Conference on Innovative Applications of Artificial Intelligence* (IAAI 2016), Phoenix, AZ, USA, 2016.
- Kishore Neppalli, Cornelia Caragea, Rob Mayes, Kim Nimon, and Fred Oswald. "MetaSeer.STEM: Towards Automating Meta-Analyses." In: Proceedings of the Twenty-Eighth Annual Conference on Innovative Applications of Artificial Intelligence (IAAI 2016), Phoenix, AZ, USA, 2016.

- 13. Haoti Zhong, Hao Li, Anna Squicciarini, Sarah Rajtmajer, Christopher Griffin, David Miller, Cornelia Caragea. "Content-driven Detection of Cyberbullying on the Instagram Social Network." In: Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016), New York City, USA, 2016.
- 14. Kishore Neppalli, Murilo Cerqueira Medeiros, Cornelia Caragea, Doina Caragea, Andrea Tapia, Shane Halse. "Retweetability Analysis and Prediction during Hurricane Sandy." In: Proceedings of the 13th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2016), Rio de Janeiro, Brazil, 2016.
- 15. Cornelia Caragea, Adrian Silvescu, Andrea Tapia. "Identifying Informative Messages in Disasters using Convolutional Neural Networks." In: Proceedings of the 13th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2016), Rio de Janeiro, Brazil, 2016.
- 16. Shane Halse, Andrea Tapia, Anna Squicciarini, **Cornelia Caragea**. "An Emotional Step Towards Automated Trust Detection in Crisis Social Media." In: *Proceedings of the 13th International Conference on Information Systems for Crisis Response and Management* (**ISCRAM 2016**), Rio de Janeiro, Brazil, 2016.
- 17. Shane Halse, Andrea Tapia, Anna Squicciarini, **Cornelia Caragea**. "Tweet Factors Influencing Trust and Usefulness During Both Man-Made and Natural Disasters." In: *Proceedings of the 13th International Conference on Information Systems for Crisis Response and Management* (**ISCRAM 2016**), Rio de Janeiro, Brazil, 2016.
- 18. Cornelia Caragea, Florin Bulgarov, and Rada Mihalcea. "Co-Training for Topic Classification of Scholarly Data." In: *Proceedings of the Conference on Empirical Methods in Natural Language Processing* (EMNLP 2015), Lisbon, Portugal, 2015. [Full Oral Presentation]
- 19. Jian Wu, Jason Killian, Huaiyu Yang, Kyle Williams, Sagnik Ray Choudhury, Suppawong Tuarob, Cornelia Caragea, C. Lee Giles. "PDFMEF: A Multi-Entity Knowledge Extraction Framework for Scholarly Documents and Semantic Search." In: Proceedings of the 8th International Conference on Knowledge Capture (K-Cap 2015), Palisades, NY, USA, 2015. Nominated for best paper award.
- 20. Andreea Godea, Cornelia Caragea, Florin Bulgarov, Suhasini Ramisetty-Mikler. "An Analysis of Twitter Data on E-cigarette Sentiments and Promotion." In: Proceedings of the 15th Conference on Artificial Intelligence in Medicine (AIME 2015), Pavia, Italy, 2015.
- 21. HongMin Li, Nicolais Guevara, Nic Herndon, Doina Caragea, Kishore Neppalli, Cornelia Caragea, Anna Squicciarini, Andrea H. Tapia. "Twitter Mining for Disaster Response: A Domain Adaptation Approach." In: Proceedings of the 12th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2015), Kristiansand, Norway, 2015.
- 22. Prakhar Biyani, **Cornelia Caragea**, Narayan Bhamidipati. "Entity-Specific Sentiment Classification of Yahoo News Comments." In: *TechPulse* Yahoo internal conference (**Yahoo TechPulse 2015**), Santa Clara, CA, USA, 2015.
- Prakhar Biyani, Sumit Bhatia, Cornelia Caragea, Prasenjit Mitra. "Using Subjectivity Analysis to Improve Thread Retrieval in Online Forums." In: Proceedings of the 37th European Conference on Information Retrieval (ECIR 2015), Vienna, Austria, 2015.
- 24. Cornelia Caragea, Florin Bulgarov, Andreea Godea, and Sujatha Das Gollapalli. "Citation-Enhanced Keyphrase Extraction from Research Papers: A Supervised Approach." In: Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP 2014), Doha, Qatar, 2014.
- 25. Brenda Reyes Ayala and **Cornelia Caragea**. "Towards Building a Collection of Web Archiving Research Articles." In: *The 2014 Annual Meeting of the Association for Information Science and Technology* (ASIS&T 2014), Seattle, WA, USA.

- Brandon Truong, Cornelia Caragea, Anna Squicciarini, Andrea H. Tapia. "Extracting Valuable Information from Twitter During Natural Disasters." In: The 2014 Annual Meeting of the Association for Information Science and Technology (ASIS&T 2014), Seattle, WA, USA.
- 27. Prakhar Biyani, **Cornelia Caragea**, Prasenjit Mitra, and John Yen. "Identifying Emotional and Informational Support in Online Health Communities." In: *Proceedings of the* 25th International Conference on Computational Linguistics (Coling 2014), Dublin, Ireland, 2014.
- Anna Squiciarrini, Cornelia Caragea, and Rahul Balakavi. "Analysing Images' Privacy for the Modern Web." In: Proceedings of the 25th ACM Conference on Hypertext and Social Media (HT 2014), Santiago, Chile, 2014.
- 29. Sujatha Das G. and Cornelia Caragea. "Extracting Keyphrases from Research Papers using Citation Networks." In: Proceedings of the 28th American Association for Artificial Intelligence (AAAI 2014), Québec City, Québec, Canada, 2014. [Full Oral Presentation]
- 30. Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabsa, **Cornelia Caragea**, Alexander Ororbia, Douglas Jordan, and C. Lee Giles. "CiteSeerX: AI in a Digital Library Search Engine." In: *Proceedings of the 26th Annual Conference on Innovative Applications of Artificial Intelligence* (**IAAI 2014**), co-located with AAAI 2014, Quebec City, Quebec, Canada, 2014. *Won the "Most Innovative Application of AI" Award.*
- 31. Siddhartha Banerjee, **Cornelia Caragea**, and Prasenjit Mitra. "Supervised Identification of Play Scripts and Automatic Wikipedia Play Article Generation." In: *Proceedings of the* 22nd International Conference on Pattern Recognition (ICPR 2014), Stockholm, Sweden, 2014.
- 32. Cornelia Caragea, Anna Squiciarrini, Sam Stehle, Kishore Neppalli, Andrea H. Tapia. "Mapping Moods: Geo-Mapped Sentiment Analysis During Hurricane Sandy." In: *Proceedings of the* 11th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2014), University Park, Pennsylvania, USA, 2014.
- 33. Cornelia Caragea, Jian Wu, Alina Ciobanu, Kyle Williams, Juan Fernández-Ramírez, Hung-Hsuan Chen, Zhaohui Wu, and C. Lee Giles. "CiteSeerX: A Scholarly Big Dataset." In: *Proceedings of the* 36th European Conference on Information Retrieval (ECIR 2014), Amsterdam, Netherlands, 2014.
- 34. Prakhar Biyani, **Cornelia Caragea**, Prasenjit Mitra, Chong Zhou, John Yen, Greta Greer, Kenneth Portier. "Co-training Over Domain-dependent and Domain-independent Features for Sentiment Analysis of an Online Cancer Support Community." In: *The 2013 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining* (ASONAM 2013), Niagara Falls, Canada, 2013.
- 35. Cornelia Caragea, Adrian Silvescu, Prasenjit Mitra, and C. Lee Giles. "Can't see the forest for the trees? A citation recommendation system." In: *Proceedings of The ACM/IEEE Joint Conference on Digital Libraries* (JCDL 2013), Indianapolis, Indiana, USA, 2013.
- 36. Sujatha Das G., **Cornelia Caragea**, Prasenjit Mitra and C. Lee Giles. "Researcher Homepage Classification using Unlabeled Data." In: *Proceedings of the* 22nd International World Wide Web Conference (**WWW 2013**), Rio de Janeiro, Brazil, 2013. [Acceptance Rate: 15%]
- 37. Prakhar Biyani, **Cornelia Caragea**, Prasenjit Mitra. "Predicting Subjectivity Orientation of Online Discussion Threads." In: *The* 14th *International Conference on Intelligent Text Processing and Computational Linguistics* (**CICLing 2013**), Samos, Greece, 2013.
- 38. Nir Ofek, Cornelia Caragea, Lior Rokach, Prakhar Biyani, Prasenjit Mitra, John Yen, Kenneth Portier, Greta Greer. "Improving Sentiment Analysis in an Online Cancer Survivor Community Using Dynamic Sentiment Lexicon." In: Proceedings of the International Conference on Social Intelligence and Technology (SOCIETY 2013), State College, PA, USA, 2013.

- 39. Prakhar Biyani, Sumit Bhatia, **Cornelia Caragea**, Prasenjit Mitra. "Thread Specific Features Are Helpful For Identifying Subjectivity Orientation of Online Forum Threads." In: *The* 24th *International Conference on Computational Linguistics* (**COLING 2012**), Mumbai, India, 2012. [Acceptance Rate: 18.82%]
- 40. Wenyi Huang, Saurabh Kataria, Cornelia Caragea, Prasenjit Mitra, C. Lee Giles, Lior Rokach. "Recommending Citations: Translating Papers into References." In: Proceedings of the 21st ACM International Conference on Information and Knowledge Management (CIKM 2012), Maui, Hawaii, 2012. [Acceptance Rate: 14.3%]
- 41. Prakhar Biyani, Cornelia Caragea, Amit K. Singh, Prasenjit Mitra. "I want what I need! Analyzing Subjectivity of Online Forum Threads." In: Proceedings of the 21st ACM International Conference on Information and Knowledge Management (CIKM 2012), Maui, Hawaii, 2012.
- 42. Cornelia Caragea, Adrian Silvescu, and Prasenjit Mitra. "Combining Hashing and Abstraction in Sparse High Dimensional Feature Spaces." In: *Proceedings of the American Association for Artificial Intelligence* (AAAI 2012), Toronto, Ontario, Canada, 2012.
- 43. Kang Zhao, Baojun Qiu, **Cornelia Caragea**, Dinghao Wu, Prasenjit Mitra, John Yen, Greta Greer, and Kenneth Portier. "Identifying Leaders in an Online Cancer Survivor Community", In: *Proceedings of the* 21st Annual Workshop on Inf. Technologies and Systems (**WITS 2011**), Shanghai, China, 2011.
- 44. Cornelia Caragea, Adrian Silvescu, and Prasenjit Mitra. "Protein Sequence Classification Using Feature Hashing." In: *Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine* (BIBM 2011), Atlanta, GA, USA, 2011.
- 45. Baojun Qiu, Kang Zhao, Prasenjit Mitra, Dinghao Wu, Cornelia Caragea, John Yen, Greta Greer, Kenneth Portier. "Get Online Support, Feel Better-Sentiment Analysis and Dynamics in an Online Cancer Survivor Community." In: Proceedings of the 3rd IEEE Intl. Conf. on Social Computing (SocialCom 2011), Boston, Massachusetts, USA, 2011.
- 46. Cornelia Caragea, Adrian Silvescu, Saurabh Kataria, Doina Caragea, and Prasenjit Mitra. "Classifying Scientific Publications Using Abstract Features." In: *Proceedings of the Symposium on Abstraction, Reformulation, and Approximation* (SARA 2011), Parador de Cardona, Spain, 2011.
- 47. Saurabh Kataria, Prasenjit Mitra, **Cornelia Caragea**, and C. Lee Giles. "Context Sensitive Topic Models for Author Influence in Document Networks." In: *Proceedings of the* 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011), Barcelona, Spain, 2011.
- 48. Sujatha Das G., C. Lee Giles, Prasenjit Mitra, and **Cornelia Caragea**. "On Identifying Academic Homepages for Digital Libraries." In: *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries* (**JCDL 2011**), Ottawa, Canada, 2011.
- 49. Cornelia Caragea, Nathan McNeese, Anuj Jaiswal, Greg Traylor, Hyun-Woo Kim, Prasenjit Mitra, Dinghao Wu, Andrea H. Tapia, C. Lee Giles, Bernard J. Jansen, John Yen. "Classifying Text Messages for the Haiti Earthquake." In: Proceedings of the 8th International Conference on Information Systems for Crisis Response and Management (ISCRAM 2011), Lisbon, Portugal, 2011.
- 50. Cornelia Caragea, Adrian Silvescu, Doina Caragea, and Vasant Honavar. "Abstraction Augmented Markov Models." In: Proceedings of the 10th IEEE International Conference on Data Mining (ICDM 2010), Sydney, Australia, 2010.
- 51. Cornelia Caragea, Adrian Silvescu, Doina Caragea, and Vasant Honavar. "Semi-Supervised Sequence Classification Using Abstraction Augmented Markov Models.", In: *Proceedings of the ACM International Conference on Bioinformatics and Computational Biology* (ACM-BCB 2010), Niagara Falls, New York, USA, 2010.

- 52. Adrian Silvescu, **Cornelia Caragea**, and Vasant Honavar. "Combining Super-Structuring and Abstraction on Sequence Classication." In: *Proceedings of the* 9th *IEEE International Conference on Data Mining* (**ICDM 2009**), Miami, Florida, USA, 2009.
- 53. Cornelia Caragea, Doina Caragea, and Vasant Honavar. "Learning Link-Based Classifiers from Ontology-Extended Textual Data." In: *Proceedings of the* 21st International Conference on Tools with Artificial Intelligence (ICTAI 2009), Newark, New Jersey, USA, 2009.
- 54. **Cornelia Caragea**, Doina Caragea, and Vasant Honavar. "Learning Link-Based Naïve Bayes Classifiers from Ontology-Extended Distributed Data." In: *Proceedings of the* 8th *International Conference on Ontologies, DataBases, and Applications of Semantics* (**ODBASE 2009**), Vilamoura, Algarve-Portugal, 2009.
- 55. Cornelia Caragea, Jivko Sinapov, Drena Dobbs, and Vasant Honavar. "Using Global Sequence Similarity to Enhance Macromolecular Sequence Labeling." In: *Proceedings of the IEEE International Conference on BioInformatics and BioMedicine* (BIBM 2008), Philadelphia, PA, USA, pp. 104-111, 2008.
- 56. Neeraj Koul, Vikas Bahirwani, **Cornelia Caragea**, Doina Caragea, and Vasant Honavar. "Learning Classifiers from Large Databases Using Statistical Queries." In: *Proceedings of the International Conference on Web Intelligence* (WI 2008), Sydney, Australia, 2008.
- 57. Jae-Hyung Lee, Michael Hamilton, Colin Gleeson, Cornelia Caragea, Peter Zaback, Jeffry Sander, Xue Li, Feihong Wu, Michael Terribilini, Vasant Honavar, and Drena Dobbs. "Striking Similarities in Diverse Telomerase Proteins Revealed by Combining Structure Prediction and Machine Learning Approaches." In: Proceedings of the Pacific Symposium on Biocomputing (PSB 2008), The Big Island of Hawaii, Vol. 13, pp. 501-512, 2008.
- 58. Cornelia Caragea, Jivko Sinapov, Drena Dobbs, and Vasant Honavar. "Assessing the Performance of Macromolecular Sequence Classifiers." In: Proceedings of IEEE 7th International Conference on BioInformatics and BioEngineering (BIBE 2007), Boston, MA, USA, pp. 320-326, 2007.

Workshop Papers:

- Ashwini Tonge and Cornelia Caragea. "On the Use of Deep Features for Online Image Sharing."
 In: Proceedings of the 9th International Workshop on Modeling Social Media, co-located with the ACM WWW 2018 conference (MSM 2018), Lyon, France, 2018.
- 2. Cornelia Caragea. "Identifying Descriptive Keyphrases from Scholarly Big Data." In: The Workshop "Artificial Intelligence for Data Science," Co-located with the Neural Information Processing Systems Conference (AI4DataSci 2016), Barcelona, Spain, 2016.
- 3. Corina Florescu and Cornelia Caragea. "An Unsupervised Algorithm for Keyphrase Extraction." In: The Workshop for Women in Machine Learning, Co-located with the Neural Information Processing Systems Conference (WiML 2016), Barcelona, Spain, 2016.
- Ashwini Tonge and Cornelia Caragea. "DeepPrivate: Accurate Prediction of Images' Privacy on the Web." In: The Workshop for Women in Machine Learning, Co-located with the Neural Information Processing Systems Conference (WiML 2016), Barcelona, Spain, 2016.
- 5. Cornelia Caragea, Jian Wu, Kyle Williams, Sujatha Das G., Madian Khabsa, Pradeep Teregowda, and C. Lee Giles. "Automatic Identification of Research Articles from Crawled Documents." In: *Proceedings of the Workshop: Web-Scale Classification: Classifying Big Data from the Web*, co-located with WSDM (WSC 2014), New York City, 2014.
- 6. Amanda Karavolia, Dimitrios Vogiatzis, Brandon Truong, Andrea H. Tapia, Cornelia Caragea, Anna Squicciarini and Georgios Paliouras. "Tweet Type, Location and Popularity: Case Study Hurricane Sandy." In: The 2014 KDD Workshop on Learning about Emergencies from Social Information, colocated with Knowledge Discovery and Data Mining 2014 (KDD-LESI 2014), New York City, USA.

- 7. Nir Ofek, Cornelia Caragea, Lior Rokach, Prakhar Biyani, Prasenjit Mitra, John Yen, Kenneth Portier, Greta Greer. "Improving Sentiment Analysis in an Online Cancer Survivor Community Using Dynamic Sentiment Lexicon." In: The 1st International Workshop on Public Health in the Digital Age: Social Media, Crowdsourcing and Participatory Systems (PHDA 2013), held in conjunction with the 22nd International World Wide Web Conference (WWW 2013).
- 8. Sumit Bhatia, **Cornelia Caragea**, Hung-Hsuan Chen, Jian Wu, Pucktada Treeratpituk, Zhaohui Wu, Madian Khabsa, Prasenjit Mitra, and C. Lee Giles. "Specialized Research Datasets in the CiteSeerx Digital Library." In: The 1st International Workshop on Mining Scientific Publications, Co-located with the ACM/IEEE Joint Conference on Digital Libraries (**JCDL WS 2012**), Washington, DC, USA, 2012.
- 9. Cornelia Caragea, Hyun-Woo Kim, Prasenjit Mitra, and John Yen. "Classifying Text Messages for Emergency Response." In: *Machine Learning for Social Computing Workshop, Co-located with the Neural Information Processing Systems Conference* (MLSC 2010), Whistler, Canada, 2010.
- 10. Rasna Walia, Cornelia Caragea, Drena Dobbs, and Vasant Honavar. "Improving the State of the Art in Machine Learning Methods for Protein-RNA Interface Prediction." In: The Workshop for Women in Machine Learning, Co-located with the Neural Information Processing Systems Conference (WiML 2010), Vancouver, BC, Canada, 2010.
- 11. Cornelia Caragea, Adrian Silvescu, Doina Caragea, and Vasant Honavar. "Abstraction Augmented Markov Models." In: *Machine Learning in Computational Biology Workshop, Co-located with the Neural Information Processing Systems Conference* (MLCB 2009), Whistler, Canada, 2009. [Acceptance Rate: 30%]
- 12. Cornelia Caragea, Adrian Silvescu, and Vasant Honavar. "Designing Abstract Features for Sequence Classification Tasks." In: *The Workshop for Women in Machine Learning, Co-located with the Neural Information Processing Systems Conference* (WiML 2009), Vancouver, BC, Canada, 2009.
- 13. Fadi Towfic, David Gemperline, Cornelia Caragea, Feihong Wu, Drena Dobbs, and Vasant Honavar. "Structural Characterization of RNA-Binding Sites of Proteins: Preliminary Results.", In: Computational Structural Bioinformatics Workshop, IEEE International Conference on Bioinformatics and Biomedicine (BIBM WS 2007), Silicon Valley, CA, USA, 2007.

Book Chapters, Tutorials, and other Technical Reports:

- 1. Sujatha Das Gollapalli, Krutarth Patel, and **Cornelia Caragea**. "A Search/Crawl Framework for Automatically Acquiring Scientific Documents." *CoRR*, 2016.
- Ashwini Tonge and Cornelia Caragea. "Privacy Prediction of Images Shared on Social Media Sites Using Deep Features." CoRR, 2015.
- Sujatha Das Gollapalli, Cornelia Caragea, Xiaoli Li, and C. Lee Giles. Tutorial on "Document Analysis
 and Retrieval Tasks in Scientific Digital Libraries." In: Proceedings of the 8th Russian Summer School
 in Information Retrieval (Russir 2014), Nizhny Novgorod, Russia, 2014.
- Prakhar Biyani, Cornelia Caragea, Narayan Bhamidipati. "Entity-Specific Sentiment Classification of Yahoo News Comments." CoRR, 2014.
- 5. Shibamouli Lahiri, Sagnik Ray Choudhury, and **Cornelia Caragea**. "Keyword and Keyphrase Extraction Using Centrality Measures on Collocation Networks." *CoRR*, 2014.
- Cornelia Caragea and Vasant Honavar. "Machine Learning in Computational Biology", In: Encyclopedia of Database Systems, 2008.

Abstracts and Poster Programs:

- Ashwini Tonge, Cornelia Caragea, and Anna Squicciarini. "Uncovering Scene Context for Predicting Privacy of Online Shared Images." In: Proceedings of the 32nd American Association for Artificial Intelligence (AAAI 2018), Student Abstract and Poster Program, New Orleans, Lousiana, USA, 2018.
- 2. Hamed Khanpour, **Cornelia Caragea**, and Prakhar Biyani. "Identifying Emotional Support in Online Health Communities." In: *Proceedings of the 32nd American Association for Artificial Intelligence* (**AAAI 2018**), Student Abstract and Poster Program, New Orleans, Lousiana, USA, 2018.
- 3. Corina Florescu and Cornelia Caragea. "A Position-Biased PageRank Algorithm for Keyphrase Extraction." In: *Proceedings of the 31st American Association for Artificial Intelligence* (AAAI 2017), Student Abstract and Poster Program (SA-17), San Francisco, California, USA, 2017.
- 4. Ashwini Tonge and Cornelia Caragea. "DeepPrivate: Accurate Prediction of Images' Privacy on the Web." In: The Grace Hopper Celebration of Women in Computing (GHC 2016), Houston, TX, 2016.
- 5. Ashwini Tonge and Cornelia Caragea. "Image Privacy Prediction Using Deep Features." In: *Proceedings of the 30th American Association for Artificial Intelligence* (AAAI 2016), Student Abstract and Poster Program (SA-16), Phoenix, Arizona, USA, 2016. Selected as a *finalist* in SA-16.
- Florin Bulgarov and Cornelia Caragea. "A Comparison of Supervised Keyphrase Extraction Models."
 In: The International World Wide Web Conference (WWW 2015), Poster Program, Florence, Italy, 2015.
- 7. Nir Ofek, Lior Rokach, Cornelia Caragea, and John Yen. "The Importance of Pronouns to Sentiment Analysis: Online Cancer Survivor Network Case Study." In: *The International World Wide Web Conference* (WWW 2015), Poster Program, Florence, Italy, 2015.
- 8. Brandon Truong, Estella Xin, and Cornelia Caragea. "Extracting Valuable Information from Twitter During Natural Disasters." Poster presented at the Fort Worth Regional Science and Engineering Fair, 2015 and at the Texas Science and Engineering Fair in San Antonio, TX, 2015. Won the 3rd place in Computer Science at the Fort Worth Regional Science and Engineering Fair.
- 9. Brenda Reyes Ayala and Cornelia Caragea "Towards Building a Collection of Web Archiving Research Articles." In: *International Internet Preservation Consortium* (IIPC 2014), Paris, France, 2014.
- Fred Oswald, Cornelia Caragea, Kim Nimon. "Technology-enhanced meta-analysis across scientific disciplines." In: The 29th Annual Conference of the Society for Industrial and Organizational Psychology (SIOP 2014), Hawaii, 2014.
- Carmen Boje and Cornelia Caragea. "Multivariate Statistical Analysis to Assess Student Performance." In: New Mexico Higher Education Assessment and Retention Conference (NMHEAR 2013), Poster Program, Albuquerque, NM, USA.
- 12. **Cornelia Caragea**, Adrian Silvescu, Prasenjit Mitra, and C. Lee Giles. "Can't see the forest for the trees? A citation recommendation system." In: *The iConference*, Poster Program, Dallas Fort Worth, TX, USA (iConference 2013).
- Kim Nimon, Cornelia Caragea, Fred Oswald. "Meta-Scraping: Proposing Techniques to Support Meta-analyses." In: The iConference, Poster Program, Dallas Fort Worth, TX, USA (iConference 2013).
- 14. Adrian Silvescu, **Cornelia Caragea**, Vasant Honavar. "Combining Abstraction and Super-Structuring on Macromolecular Sequence Classication." In: *The* 13th Annual International Conference on Research in Computational Molecular Biology (**RECOMB 2009**), Poster Program, Tucson, AZ, USA.
- Adrian Silvescu, Cornelia Caragea, Vasant Honavar. "Predicting Protein Subcellular Localization Using Abstract Sequential Features." In: The 17th Annual International Conference on Intelligent Systems For Molecular Biology (ISMB 2009), Poster Program, Stockholm, Sweden.

- 16. Cornelia Caragea, Michael Terribilini, Jivko Sinapov, Jae-Hyung Lee, Fadi Towfic, Drena Dobbs, and Vasant Honavar. "Predicting Protein-RNA Binding Sites Using Structural Information." In: The 16th Annual International Conference On Intelligent Systems For Molecular Biology (ISMB 2008), Poster Program, Toronto, Canada.
- 17. Jivko Sinapov, **Cornelia Caragea**, Drena Dobbs, and Vasant Honavar. "Using Global Sequence Similarity Improves Biological Site-Specific Classifiers." In: *The* 16th Annual International Conference On Intelligent Systems For Molecular Biology (ISMB 2008), Poster Program, Toronto, Canada.
- 18. Michael Terribilini, Cornelia Caragea, Deepak Reyon, Jeffry Sander, Jae-Hyung Lee, Robert Jernigan, Vasant Honavar, and Drena Dobbs. "Comparing Sequence and Structure-based Classifiers for Predicting RNA Binding Sites in Specific Families of RNA Binding Proteins." In: The 16th Annual International Conference On Intelligent Systems For Molecular Biology (ISMB 2008), Poster Program, Toronto, Canada.
- 19. Deepak Reyon, Ben Lewis, Jae-Hyung Lee, Colin Gleeson, Michael Hamilton, Cornelia Caragea, Fadi Towfic, Michael Terribilini, Vasant Honavar, and Drena Dobbs. "Combining Structural Modeling, Evolutionary Information, and Machine Learning to Improve Prediction of Nucleic Acid Binding Sites in Telomerase." In: The 5th Annual Rocky Mountain Bioinformatics Conference (Rocky 2007), Poster Program, Aspen/Snowmass, CO.
- Michael Terribilini, Jeffry Sander, Cornelia Caragea, Jae-Hyung Lee, Robert Jernigan, Vasant Honavar and Drena Dobbs. "Comparing Sequence vs. Structure-based Predictions of RNA Binding Sites in Proteins." In: Midwest Symposium on Computational Biology and Bioinformatics (MSCBB 2007), Poster Program, Chicago, IL.
- 21. Fadi Towfic, David Gemperline, **Cornelia Caragea**, Feihong Wu, Drena Dobbs, and Vasant Honavar. "Prediction of RNA-Protein Interfaces Using Structural Features." In: *Midwest Symposium on Computational Biology and Bioinformatics* (MSCBB 2007), Poster Program, Chicago, IL.
- 22. Colin Gleeson, Michael Hamilton, Jae-Hyung Lee, Cornelia Caragea, Vasant Honavar, and Drena Dobbs. "Generating Models as a Platform for Comparing Functional and Structural Elements of Telomerase." In: The 16th Annual Growth Factor and Signal Transduction Conferences (GFST 2007), Ames, IA.
- 23. Cornelia Caragea, Jivko Sinapov, Michael Terribilini, Drena Dobbs, and Vasant Honavar. "Assessing the Performance of Macromolecular Sequence Classifiers." In: The 15th Annual International Conference On Intelligent Systems For Molecular Biology and the 6th European Conference on Computational Biology (ISMB/ECCB 2007), Poster Program, Vienna, Austria.
- 24. Doina Caragea, Cornelia Caragea, Jie Bao, and Vasant Honavar. "Ontology-Based Information Integration Using INDUS: Intelligent Data Understanding System." In: *The Emerging Technologies Conference* (ETC 2007), Ames, IA.
- 25. Cornelia Caragea, Jivko Sinapov, Adrian Silvescu, Drena Dobbs, and Vasant Honavar. "Glycosylation Site Prediction using Machine Learning Approaches." In: *The* 11th Annual International Conference on Research in Computational Molecular Biology (**RECOMB 2007**), Poster Program, Oakland, CA.
- 26. Cornelia Caragea, Jivko Sinapov, Adrian Silvescu, Drena Dobbs, and Vasant Honavar. "Learning Classifiers to Predict Glycosylation Sites in Proteins." In: The 4th Annual Rocky Mountain Bioinformatics Conference (Rocky 2006), Poster Program, Aspen/Snowmass, CO.
- 27. Yasser El-Manzalawy, **Cornelia Caragea**, Drena Dobbs, Vasant Honavar. "On the Quality of Motifs for Protein Phosphorylation Site Prediction." In: *The* 14th Annual International Conference On Intelligent Systems For Molecular Biology (ISMB 2006), Poster Program, Fortaleza, Brazil.
- 28. Yasser El-Manzalawy, **Cornelia Caragea**, Drena Dobbs, Vasant Honavar. "Machine Learning versus Profile-Based Methods for Protein Phosphorylation Site Prediction." In: *The* 6th Annual Joint Bioinformatics Symposium, Student Abstract and Poster Program, Ames, IA.

29. Cornelia Caragea, Doina Caragea and Vasant Honavar. "Learning Support Vector Machine Classifiers from Distributed Data Sources." In: *The* 20th National Conference on Artificial Intelligence (AAAI 2005), Student Abstract and Poster Program, Pittsburgh, PA. Pp. 1602-1603. AAAI Press.

Invited Talks and Presentations

- 1. "Designing an Unsupervised Approach to Keyphrase Extraction Using Ideas from Supervised Approaches." *Invited Talk* at Virginia Tech, Washington, DC, April 13, 2018.
- 2. "Improving Disaster Response Through the Eyes of Social Media." *Invited Talk* at The University of Oklahoma, Norman, OK, April 9, 2018.
- 3. "Learning to Extract Descriptive Keyphrases from Scholarly Big Data." *Invited Speaker* at the *IEEE MetroCon*, Arlington Convention Center, TX, October 26, 2017.
- 4. "Learning to Extract Descriptive Keyphrases from Scholarly Big Data." *Invited Talk* at Southern Methodist University (SMU), September 29, 2017.
- 5. "Improving Disaster Response Through the Eyes of Social Media." *Invited Talk* at the 10th Conference on PErvasive Technologies Related to Assistive Environments (PETRA 2017), June 22, 2017.
- 6. "Learning to Extract Descriptive Keyphrases from Scholarly Big Data." *Invited Talk* at the 1st Conference on Recent Advances in Artificial Intelligence (RAAI 2017) organized by the University of Bucharest, June 19, 2017.
- "Image Privacy Prediction Using Deep Features." Presentation at the Researcher Luncheon and Poster Forum at the Fort Worth Museum of Science and History in the Research and Learning Center, Fort Worth, Texas, May 20, 2017.
- 8. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Invited Talk* at Temple University, Philadelphia, Pennsylvania, April 26, 2017.
- 9. "Keyphrase Extraction in Document Networks." *Invited Talk* at the University of Texas at Dallas, Dallas, Texas, April 14, 2017.
- 10. "Image Privacy Prediction Using Deep Features." *Presentation* at the 2017 Secure and Trustworthy Cyberspace Principal Investigators' Meeting (SaTC PI Meeting '17), 2017.
- 11. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Presentation* at the University of the Andes, Bogotá, Colombia, June 15, 2016.
- 12. "Geo-Mapped Sentiment Analysis in Disaster Events." *Presentation* at the Researcher Luncheon and Poster Forum at the Fort Worth Museum of Science and History in the Research and Learning Center, Fort Worth, Texas, May 21, 2016.
- "Identifying Informative Messages in Disasters using Convolutional Neural Networks." Presentation at the 13th International Conference on Information Systems for Crisis Response and Management, Rio de Janeiro, Brazil, 2016.
- 14. "Document Type Classification in Online Digital Libraries." *Presentation* at the 28th Annual Conference on Innovative Applications of Artificial Intelligence, Phoenix, AZ, USA, 2016.
- 15. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Talk* at the University of Texas at Arlington, Arlington, Texas, March 1, 2016.
- 16. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" Talk at the University of Oregon, Eugene, Oregon, February 23, 2016.
- 17. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Invited talk* (Speaker) at the *IEEE Metro Con*, Arlington Convention Center, TX, October 22, 2015.

- 18. "Keyphrase Extraction for Scholarly Big Data." Invited talk at the Big Scholarly Data: Birds of a Feather Session, co-located with Microsoft Research Faculty Summit, Redmond, WA, July 10, 2015.
- "Extracting Keyphrases from Research Papers using Citation Networks." Presentation at the Researcher Luncheon and Poster Forum at the Fort Worth Museum of Science and History in the Research and Learning Center, Fort Worth, Texas, March 7, 2015.
- 20. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Invited talk* at the University of Texas at Austin, Austin, Texas, February 13, 2015.
- 21. "Keyphrase Extraction in Citation Networks: How do Citation Contexts Help?" *Invited talk* at the University of Michigan, Ann Arbor, Michigan, November 21, 2014.
- 22. "Big Data and its Implications for Research Methodology and Funding." *Invited talk* at the University of North Texas at "TARDIS The Advances in Research DesIgns Symposium." Held at the Gateway Center at UNT, Denton, TX, on November 7, 2014.
- 23. "CiteSeerX: A Scholarly Big Dataset." *Presentation* at the 36th European Conference on Information Retrieval, Amsterdam, Netherlands, 2014.
- 24. "Abstraction-Based Probabilistic Models for Sequence Classification." *Invited talk* at the International Research-Centered Summer School in Cognitive Systems and Interactive Robotics, Social Media, and Digital Preservation, organized by the Software & Knowledge Engineering Lab at the Institute of Informatics & Telecommunications of NCSR "Demokritos", in Athens, Greece, July 29, 2013.
- 25. "Combining Hashing and Abstraction in Sparse High Dimensional Feature Spaces." *Invited talk* at the Machine Learning and Bioinformatics Laboratory at Kansas State University, Manhattan, Kansas, September 27, 2013.
- 26. "Abstraction-Based Probabilistic Models for Sequence Classification." *Invited talk* at the University of the Andes, Bogotá, Colombia, June 10, 2013.
- 27. "Abstraction-Based Probabilistic Models for Sequence Classification." *Talk* in the College of Engineering at the University of North Texas, Denton, Texas, May 10, 2013 (at the CSE Advisory Council meeting).
- 28. "Abstraction-Based Probabilistic Models for Sequence Classification." *Talk* in Computer Science and Engineering at the University of North Texas, Denton, Texas, December 7, 2012 (at the Industrial Advisory Board meeting).
- 29. "Abstraction-Based Probabilistic Models for Sequence Classification." *Talk* at the Pennsylvania State University, University Park, Pennsylvania, June, 2010.

Awards and Honors

The Lloyd T. Smith Creativity in Engineering Chair

2017 - 2022

Received The Lloyd T. Smith Creativity in Engineering Chair - Endowed Chair at Kansas State University.

Best paper nomination in the 8th International Conference on Knowledge Capture 2015
Best paper nomination for the paper "PDFMEF: A Multi-Entity Knowledge Extraction Framework for Scholarly Documents and Semantic Search." by Jian Wu, Jason Killian, Huaiyu Yang, Kyle Williams, Sagnik Ray Choudhury, Suppawong Tuarob, Cornelia Caragea, C. Lee Giles at The 8th International Conference on Knowledge Capture (K-Cap 2015).

 3^{rd} place in Computer Science at the Fort Worth Regional Science and Engineering Fair 2015 Award received for research work done with two TAMS (Texas Academy of Math and Science) high-school students, Brandon Truong and Estella Xin, for the paper "Extracting Valuable Information from Twitter During Natural Disasters." The two students, Brandon and Estella were finalists at the Texas Science and

Engineering Fair in San Antonio, TX.

"Most Innovative Application of AI" Award

2014

Award received for the paper "CiteSeerX: AI in a Digital Library Search Engine." by Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabsa, Cornelia Caragea, Alexander Ororbia, Douglas Jordan, and C. Lee Giles at The Twenty sixth Annual Conference on Innovative Applications of Artificial Intelligence (IAAI '14).

John Vincent Atanasoff Award

2005

Annual award offered by the Computer Science Department to outstanding graduate students.

PACE Award 2003 - 2004

Premium for Academic Excellence from Iowa State University.

Leonardo Melandri Program Award

December 10-15, 2006

DASI '06: Bertinoro PhD School on Data and Service Integration, Bertinoro, Italy.

RECOMB Student Scholarship

May 18-21, 2009

Awarded by the 13^{th} Annual International Conference on Research in Computational Molecular Biology, Tucson, AZ, USA.

ISMB Student Scholarship

July 19-23, 2008

Awarded by the 16^{th} Annual International Conference on Intelligent Systems for Molecular Biology, Toronto, Canada.

AAAI Student Scholarship

July 9-13, 2005

Awarded by the 20^{th} National Conference on Artificial Intelligence, Pittsburgh, PA, USA.

Teaching Experience

Computer Science, Kansas State University, USA

• CS 833: "Information Retrieval and Web Search" - graduate course

Fall 2017

Computer Science and Engineering, University of North Texas, USA

- CSE 5215: "Machine Learning" graduate and undergraduate course Fall 2016, 2015, 2014, 2013, 2012
- CSE 5200: "Information Retrieval and Web Search" graduate and undergraduate course Spring 2017, 2016, 2015, 2014
- \bullet CSE 6933: "Social Network Analysis" advanced graduate course

Spring 2013

The 8th Russian Summer School in Information Retrieval, Nizhny Novgorod, Russia.

• RuSSIR 2014: "Document Analysis and Retrieval in Scientific Digital Libraries: Case studies in applying Machine Learning for Information Retrieval" - graduate course

Summer 2014

Computer Science and Engineering, University of the Andés, Boqota, Colombia

• "Knowledge Discovery in Social and Information Networks" - graduate course Summer 2016, 2013

College of Information Sciences and Technology, Pennsylvania State University, USA

Teaching Assistant, Department of Computer Science, Iowa State University

• ComS 104: "Introduction to Computers" - undergraduate course	Fall 2003
\bullet ComS 104: "Introduction to Computers" - undergraduate course	Spring 2004
\bullet ComS 472/572: "Principles of Artificial Intelligence" - graduate course	Fall 2004
\bullet ComS 228: "Introduction to Data Structures" - undergraduate course	Spring 2005
\bullet Com S 330: "Discrete Computational Structures" - undergraduate course	Fall 2005
• ComS 311: "Design and Analysis of Algorithms" - undergraduate course	Spring 2006

Teaching Assistant, Bioinformatics and Computational Biology Summer Institute for Undergraduate Students, Iowa State University

• Module F: Machine Learning Methods in Bioinformatics	Summer 2006
• Module G: Computational Analysis of "Omics" data: Machine Learning Approaches	Summer 2007
Module G: Machine Learning Approaches and Systems Biology	Summer 2008

AI Seminar, Department of Computer Science, Iowa State University

• I gave presentations, and helped organize the AI Seminar coordinated by Dr. Vasant Honavar Spring 2004 - Fall 2006

Guest Lectures

• I gave several lectures in graduate courses on "Machine Learning" (Prof. Vasant Honavar), "Artificial Intelligence" (Prof. Dimitris Margaritis), and in the undergraduate course on "Design and Analysis of Algorithms" (Prof. David Fernández-Baca).

Student Advising

Current Graduate Students:

- 1. Krutarth Patel [PhD]
- 2. Ashwini Tonge [PhD]
- 3. Hamed Khanpour [PhD]
- 4. Vira Patel [MS]

Past Ph.D. Students:

1. Kishore Neppalli [PhD]

PhD Dissertation: "Extracting Useful Information from Social Media during Disaster Events." Dissertation Defense Date: March 24, 2017.

Now Data Scientist at Kaiser Permanente.

Past MS Students:

1. Milad Pejmanrad [MS] - Spring 2016

- 2. Ruichen Rong [MS] Spring 2016
- 3. Preethi Mudumba [MS] Fall 2015
- 4. Indish Cholleti [MS]
- 5. Keerthana Sadam [MS]
- 6. Shruthi Tirandas [MS]
- 7. Shailesh Acharya [MS]
- 8. Manoj Kumar Panchagnula [MS]
- 9. Aaditya Chauhan [MS]
- 10. Gopikrishna Reddy Puchakayala [MS]

Past Undergraduate Students:

- 1. Jacob White, Undergraduate UNT student
- 2. Daniel Moore, Undergraduate UNT student
- 3. Clement Cole, Undergraduate UNT student
- 4. Murilo Cerqueira Medeiros, Undergraduate student from Brazil
- 5. Josh Talkington, Undergraduate UNT student
- 6. Daniel Stieben, Student from the Honors College from UNT

Past TAMS High-School Students:

- 1. Brandon Truong. Accepted as an undergraduate at Stanford University
- 2. Estella Xin. Accepted as an undergraduate at University of Texas at Austin
- 3. Terrence Liu
- 4. Chris McAlpine
- 5. Karan Coimbatore
- 6. Nathan Contreras

Visiting Students:

- 1. Lucas Sterckx, PhD student at Ghent University iMinds, Belgium, Spring 2016
- 2. Namchi Do, DREU: Distributed Research Experiences for Undergraduates, Undergraduate Student from Trinity University, Summer 2015

Past Post-doctoral Research Associate:

1. Sujatha Das Gollapalli. Now at the Institute for Infocomm Research, A*STAR, Singapore.

Other Mentored Students

Graduate Students:

- 1. Brenda Reyes Ayala [LIS UNT]
- 2. Alina Ciobanu [University of Bucharest, Romania]
- 3. Nir Ofek [Ben-Gurion University of the Negev, Israel]
- 4. Prakhar Biyani [PSU]
- 5. Sujatha Das Gollapalli [PSU]
- 6. Saurabh Kataria [PSU]
- 7. Shibamouli Lahiri [UMich]

- 8. Raunaq Malhotra [PSU]
- 9. Tony Nguyen [PSU]
- 10. Rasna Walia [ISU]
- 11. Fadi Towfic [ISU]
- 12. Neeraj Koul [ISU]

Undergraduate Students:

- 1. Lalith Polepeddi [ISU BCB Summer Institute]
- 2. Chong Hoon Kim [ISU BCB Summer Institute]
- 3. Kevin Yang [ISU Summer Internship]
- 4. David Gemperline [ISU BCB Summer Institute]
- 5. Marjie Volk [ISU]

Student Committee

I have served or I am serving in the dissertation or thesis committee of the following students:

PhD Students (completed):

1. Prakhar Biyani [PSU]

Thesis: "Subjectivity analysis of online forums."

Now Research Scientist at Yahoo Labs, Sunnyvale, CA

2. Kathryn Masten-Cain [UNT]

Thesis: "Toward a grounded theory of community networking."

Now Assistant Professor at Texas Women University

3. Jedsada Chartree [UNT]

Thesis: "Monitoring Dengue outbreaks using online data."

4. Saratchandra Indrakanti [UNT]

Thesis: "Computational Methods for Vulnerability Analysis and Resource Allocation in Public Health Emergencies."

5. Angel Bravo-Salgado [UNT]

Thesis: "Modeling and Simulation of the Vector-Borne Dengue Disease and the Effects of Regional Variation of Temperature in the Disease Prevalence in a Homogenous and Heterogeneous Human Population."

6. Umar Albalawi [UNT]

Thesis: "New Frameworks for Secure Image Communication in the Internet of Things (IoT)."

7. Garima Bajwa [UNT]

Thesis: "Sensing and Decoding Brain States for Predicting and Enhancing Human Behavior, Health, and Security."

8. Shanti Thiyagaraja [UNT]

Thesis: "Detection and Classification of Heart Sounds Using a Heart-Mobile Interface."

9. Karen Mazidi [UNT]

Thesis: "Infusing Automatic Question Generation with Natural Language Understanding."

10. Alberto Castro-Hernandez [UNT]

Thesis: "Content and Temporal Analysis of Communications to Predict Task Cohesion in Software Development Global Teams."

Master Students (completed):

1. David Jensen [UNT]

Thesis: "DDOS defense against botnets in the mobile cloud."

2. Rajitha Schellenberg [UNT]

Thesis: "Automated classification of emotions in song lyrics."

- 3. Kok Chuan (KC) Koh [UNT]
 - Thesis: "Modeling alcohol Consumption using blog data."
- 4. Ramu Reddy Venumuddala [UNT]
 - Thesis: "A Distributed Framework towards Building an Open Data Architecture."
- 5. Samir Koppikar [UNT]
 - Thesis: "Privacy Preserving EEG-based Authentication Using Perceptual Hashing."
- 6. Ashwini Tonge [UNT]
 - Thesis: "Object Recognition Using Scale-Invariant Chordiogram."

PhD Students:

- 1. David Haraburda [UNT]
- 2. Song Huang [UNT]
- 3. Zongze Li [UNT]
- 4. Zhi Qiao [UNT]
- 5. Shuwen Liang [UNT]
- 6. Chris Williams [UNT]
- 7. Joseph Helsing [UNT]
- 8. Brenda Reyes Ayala [UNT-LIS]
- 9. Yassir Hashem [UNT]
- 10. Ryan Michaels [UNT]
- 11. Dmitry Nurmuradov [UNT]
- 12. Zhi Liu [UNT]
- 13. Sultan Radhi [UNT]
- 14. Yang Zhou [UNT]
- 15. Phuc Nguyen [UNT]
- 16. Prasanth Yanambaka [UNT]
- 17. Prabha Sundaravadivel [UNT]

Professional Services

Workshop Organizer:

- 1. Cornelia Caragea¹, Madian Khabsa², Sujatha Das Gollapalli³, C. Lee Giles⁴, Alex Wade⁵. "The IJCAI-16 Workshop on Scholarly Big Data: AI Perspectives, Challenges and Ideas." To be presented at: The International Joint Conference on Artificial Intelligence 2016 (IJCAI 2016), July 9-11, 2016, New York, USA. ¹University of North Texas; ²Microsoft Research; ³Institute for Infocomm Research, A*STAR, Singapore; ⁴Pennsylvania State University; ⁵Microsoft Academic Search.
- 2. Cornelia Caragea¹, C. Lee Giles², Alex Wade³, Doina Caragea⁴, Vu Ha⁵, Madian Khabsa⁶, Irwin King⁷, Jie Tang⁸. "The AAAI-16 Workshop on Scholarly Big Data: AI Perspectives, Challenges and Ideas." In: The Association for the Advancement of Artificial Intelligence 2016 (AAAI 2016), 13 Feb. 2016, Phoenix, AZ, USA. ¹University of North Texas; ²Pennsylvania State University; ³Microsoft Academic Search; ⁴Kansas State University; ⁵Allen Institute for Artificial Intelligence; ⁶Microsoft Research; ⁷The Chinese University of Hong Kong, Shatin, NT, Hong Kong; ⁸Tsinghua University, Beijing, China.
- 3. Sujatha Das G.¹, **Cornelia Caragea**², C. Lee Giles³, Xiaoli Li¹. "The ACL-15 Workshop on Novel Computational Approaches to Keyphrase Extraction." In: *The 53rd Annual Meeting of the Association for Computational Linguistics 2015* (**ACL 2015**), 30-31 July 2015, Beijing, China. ¹Institute for Infocomm Research, A*STAR, Singapore; ²University of North Texas; ³Pennsylvania State University.

- 4. Cornelia Caragea¹, C. Lee Giles², Narayan Bhamidipati³, Doina Caragea⁴, Sujatha Das G.⁵, Saurabh Kataria⁶, Huan Liu⁷, Feng Xia⁸. "Workshop on Scholarly Big Data: AI Perspectives, Challenges and Ideas." In: The Association for the Advancement of Artificial Intelligence 2015 (AAAI 2015), 25 Jan. 2015, Austin, TX, USA. ¹University of North Texas; ²Pennsylvania State University; ³Yahoo! Labs, USA; ⁴Kansas State University, USA; ⁵Institute for Infocomm Research, A*STAR, Singapore; ⁶Palo Alto Research Center, USA; ⁷Arizona State University, USA; ⁸Dalian University of Technology, China.
- 5. Cornelia Caragea¹, C. Lee Giles², Sujatha Das G.³, Ingemar J. Cox⁴, Christina Lioma⁴, Natasa Milic-Frayling⁵, Madian Khabsa², Daqing He⁶, and Yu-Ru Lin⁶. "Workshop on Scholarly Big Data: Challenges and Ideas." In: The 2014 IEEE International Conference on Big Data (IEEE BigData 2014), 27 October 2014, Washington DC, USA. ¹University of North Texas; ²Pennsylvania State University; ³Institute for Infocomm Research, A*STAR, Singapore; ⁴University of Copenhagen, Denmark; ⁵Microsoft Research Cambridge, UK; ⁶University of Pittsburgh, USA.
- 6. Cornelia Caragea¹, C. Lee Giles², Lior Rokach³, and Xiaozhong Liu⁴. "Computational Scientometrics: Theory and Applications." Workshop presented in: The 22nd International Conference on Information and Knowledge Management (CIKM 2013), 28 October 2013, San Francisco, USA. ¹University of North Texas; ²Pennsylvania State University; ³Ben-Gurion University of the Negev, Israel; ⁴Indiana University.
- 7. C. Lee Giles¹, Cornelia Caragea², Ingemar J. Cox³, Birger Larsen³, Christina Lioma³, Natasa Milic-Frayling⁴, Velte Torvik⁵. "Workshop on Scholarly Big Data: Challenges and Ideas." Workshop presented in: The 2013 IEEE International Conference on Big Data (IEEE BigData 2013), 6 October 2013, Santa Clara, USA. ¹Pennsylvania State University; ²University of North Texas; ³University of Copenhagen, Denmark; ⁴Microsoft Research Cambridge, UK; ⁵University of Illinois, Urbana-Champaign, USA.
- 8. Cornelia Caragea¹, C. Lee Giles², Vetle Torvik³, and Lior Rokach⁴ "Computational Scientometrics: Theory and Applications." Workshop presented in: **The iConference 2013**, 12 February 2013, Dallas Fort Worth, USA. ¹University of North Texas; ²Pennsylvania State University; ³University of Illinois at Urbana-Champaign; ⁴Ben-Gurion University of the Negev, Israel.

Grant Proposal Reviewer:

- 1. National Science Foundation (**NSF** 3 panels): 2018.
- 2. National Science Foundation (NSF 2 panels): 2017.
- 3. Ralph E. Powe Junior Faculty Award: 2017.
- 4. Swiss National Science Foundation (SNSF): 2016.
- 5. National Science Foundation (NSF 4 panels): 2016.
- 6. Ralph E. Powe Junior Faculty Award: 2016.
- 7. Swiss National Science Foundation (SNSF): 2015.
- 8. Ralph E. Powe Junior Faculty Award: 2015.
- 9. National Science Foundation (NSF 2 panels): 2014.
- 10. National Science Foundation (**NSF** 2 panels): 2013.

Program Committee (PC) Member:

- 1. BigData 2018: 2018 IEEE International Conference on Big Data
- 2. NAACL 2018: The Annual Conference of the North American Chapter of the Association for Computational Linguistics
- 3. AAAI 2018: The 32nd AAAI Conference on Artificial Intelligence
- 4. LREC 2018: 11th edition of the Language Resources and Evaluation Conference
- 5. NLDB 2018: The 23^{rd} Int. Conference on Application of Natural Language to Information Systems
- 6. BigData 2017: 2017 IEEE International Conference on Big Data
- 7. EMNLP 2017: Conference on Empirical Methods in Natural Language Processing

- 8. CoNLL 2017: The SIGNLL Conference on Computational Natural Language Learning
- 9. ACL 2017: The 55^{th} Annual Meeting of the Association for Computational Linguistics
- SIGIR 2017: The 40th International ACM SIGIR Conference on Research and Development in Information Retrieval
- 11. WWW 2017: The 26^{th} International World Wide Web Conference
- 12. AAAI 2017: The 31^{st} AAAI Conference on Artificial Intelligence
- 13. SAC 2017: Track on Recommender Systems in the 32nd ACM Symposium On Applied Computing
- 14. ISCRAM 2017: The 14th Int. Conf. on Information Systems for Crisis Response and Management
- 15. NLDB 2017: The 22nd Int. Conference on Application of Natural Language to Information Systems
- 16. BIR 2017: ECIR Workshop on "Bibliometric-enhanced Information Retrieval"
- 17. iNIS 2017: IEEE International Symposium on Nanoelectronic and Information Systems
- 18. Coling 2016: The 26th International Conference on Computational Linguistics
- 19. HCOMP 2016: The 4^{th} AAAI Conference on Human Computation and Crowdsourcing
- 20. EMNLP 2016: Conference on Empirical Methods in Natural Language Processing
- 21. SIGIR 2016: The 39th International ACM SIGIR Conference on Research and Development in Information Retrieval
- 22. NAACL 2016: The 15th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies
- 23. WWW 2016: The 25^{th} International World Wide Web Conference
- 24. AAAI 2016: The 30th AAAI Conference on Artificial Intelligence
- 25. NLDB 2016: The 21^{st} Int. Conference on Application of Natural Language to Information Systems
- 26. ISCRAM 2016: The 13th Int. Conf. on Information Systems for Crisis Response and Management
- 27. NLPIR4DL 2016: Workshop on NLP and Information Retrieval for Digital Libraries
- 28. PIR 2016: Workshop on Proactive Information Retrieval collocated with ECIR 2016
- 29. BIR 2016: ECIR Workshop on "Bibliometric-enhanced Information Retrieval"
- 30. EMNLP 2015: Conference on Empirical Methods in Natural Language Processing
- 31. BIR 2015: ECIR Workshop on "Bibliometric-enhanced Information Retrieval"
- 32. NLDB 2015: The 20th Int. Conference on Application of Natural Language to Information Systems
- 33. ISCRAM 2015: The 12^{th} Int. Conf. on Information Systems for Crisis Response and Management
- 34. Coling 2014: The 25^{th} International Conference on Computational Linguistics
- 35. ACL 2014: The 52nd Annual Meeting of the Association for Computational Linguistics
- 36. SMDM 2014: ICDM workshop on "Social Multimedia Data Mining"
- 37. ISCRAM 2014: The 11th Int. Conf. on Information Systems for Crisis Response and Management
- 38. SAC 2014: Track on Recommender Systems in the 29th ACM Symposium On Applied Computing
- 39. BIR 2014: ECIR Workshop on "Bibliometric-enhanced Information Retrieval"
- 40. SAC 2013: Track on Recommender Systems in the 28th ACM Symposium On Applied Computing
- 41. BCB HIS 2013: ACM Bioinformatics and Computational Biology
- 42. IJCAI 2013: The 23^{rd} International Joint Conference on Artificial Intelligence
- 43. ACL 2013: The 51st Annual Meeting of the Association for Computational Linguistics
- 44. SOCIETY 2013: The International Conference on Social Intelligence and Technology
- 45. SAC 2012: Track on Recommender Systems in the 27th ACM Symposium On Applied Computing
- 46. CIKM 2012: ACM International Conference on Information and Knowledge Management
- 47. SocialCom 2012: ASE/IEEE International Conference on Social Computing
- 48. IJCBS 2009: Int. Joint Conferences on Bioinformatics, Systems biology and computational intelligent

Other Conference Article Reviewer:

- 1. $DocEng\ 2015$: The 15th ACM SIGWEB International Symposium on Document Engineering
- 2. WABI 2014: The Workshop on Algorithms in Bioinformatics
- 3. BIBM 2013: IEEE International Conference on Bioinformatics & Biomedicine
- 4. CIKM 2013: ACM International Conference on Information and Knowledge Management
- 5. JCDL 2013: Joint Conference on Digital Libraries
- 6. BIBM 2012: IEEE International Conference on Bioinformatics & Biomedicine
- 7. WWW 2012: International World Wide Web Conference
- 8. KDD 2011: ACM SIGKDD Conference on Knowledge Discovery and Data Mining
- 9. JCDL 2011: ACM/IEEE Joint Conference on Digital Libraries
- 10. SIGIR 2011: International ACM SIGIR Conference
- 11. WWW 2011: International World Wide Web Conference
- 12. BIBM 2011: IEEE International Conference on Bioinformatics & Biomedicine
- 13. ICDM 2010: IEEE International Conference on Data Mining
- 14. ICDL 2010: IEEE International Conference on Development and Learning
- 15. ACM-BCB 2010: ACM International Conference On Bioinformatics and Computational Biology
- 16. ISMB 2010: ISMB Student Council
- 17. IICAI 2007: Indian International Conference on Artificial Intelligence

Journal Article Reviewer:

- 1. TBCB 2018: Transactions of Bioinformatics and Computational Biology
- 2. TACL 2018: Transactions of the Association for Computational Linguistics
- 3. TACL 2017: Transactions of the Association for Computational Linguistics
- 4. TKDE 2017: Transactions on Knowledge and Data Engineering
- 5. LREV 2017: Language Resources and Evaluation, 2017
- 6. PONE 2017: PLOS ONE, 2017
- 7. KBS 2017: Knowledge-Based Systems, 2017
- 8. IEEE IS 2017: IEEE Intelligent Systems, 2017
- 9. IEEE TIFS 2017: IEEE Transactions on Information Forensics & Security, 2017
- 10. IEEE IS 2016: Information Systems, 2016
- 11. TACL 2016: Transactions of the Association for Computational Linguistics
- 12. KNOSYS 2016: Knowledge-Based Systems
- 13. *PONE 2016:* PLOS ONE
- 14. JCCM 2016: Journal of Contingencies and Crisis Management, Special Issue on Human-Computer Interaction in Critical Systems
- 15. ACM TKDE 2015: ACM Transactions on Knowledge and Data Engineering
- 16. JAIR 2015: Journal of Artificial Intelligence Research
- 17. Entropy 2015
- 18. IJDMMM 2015: International Journal of Data Mining, Modelling and Management
- 19. IEEE/ACM TCBB 2014: IEEE/ACM Transactions on Computational Biology and Bioinformatics
- 20. ACM TBCB 2014: ACM Transactions on Bioinformatics and Computational Biology
- 21. ACM TKDE 2014: ACM Transactions on Knowledge and Data Engineering
- 22. PLOS ONE 2014
- 23. TAC 2014: Transactions on Affective Computing
- 24. Aslib 2014: Aslib Proceedings
- 25. NLE 2013: Natural Language Engineering
- 26. CEJCS 2013: Central European Journal of Computer Science

- 27. MDPI Information 2013
- 28. CBAC 2013: Computational Biology and Chemistry
- 29. ACM TKDE 2013: ACM Transactions on Knowledge and Data Engineering
- 30. ACM TIST 2013: ACM Transactions on Intelligent Systems and Technology
- 31. IEEE/ACM TCBB 2013: IEEE/ACM Transactions on Computational Biology and Bioinformatics
- 32. Nature 2012
- 33. Amino Acids 2012
- 34. IJDMB 2011: International Journal of Data Mining and Bioinformatics
- 35. BMC Bioinformatics 2010
- 36. IJDMB 2010: International Journal of Data Mining and Bioinformatics
- 37. NCA 2009: Neural Computing and Applications
- 38. GPB 2009: Genomics, Proteomics & Bioinformatics
- 39. Amino Acids 2009
- 40. BMC Bioinformatics 2007

Panelist:

- "Approaching the Singularity: The Future of Computational Intelligence." Panel at the IEEE MetroCon at the Arlington Convention Center, in Arlington, TX, October 26, 2017.
- "Making the Leap: Jumping into An(other) Academic Position." Panel at the Grace Hopper Celebration of Women in Computing, Orlando, FL, October 6, 2017.
- "Empowered by IT. Emerging Frontiers in Computation." Panel at the 2011 IST Graduate Student Symposium: "Getting Graduate Students *There*", The Pennsylvania State University.

Workshops Reviewer:

• IJCAI 2017: The International Joint Conference on Artificial Intelligence

Workshops Co-Chair:

• NAACL HLT 2015: The 2015 Conference of the North American Chapter of the Association for Computational Linguistics - Human Language Technologies.

Conference and Workshop Session Chair:

- The 31st AAAI Conference on Artificial Intelligence (**AAAI 2017**), 2016.
- The 30th AAAI Conference on Artificial Intelligence (AAAI 2016), 2016.
- ACM International Conference on Information and Knowledge Management (CIKM 2012), 2012.
- The AAAI-16 International Workshop on "Scholarly Big Data: AI Perspectives, Challenges and Ideas." held in conjunction with The Association for the Advancement of Artificial Intelligence 2016 (AAAI 2016), 13 February 2016, Phoenix, AZ, USA.
- The AAAI-15 International Workshop on "Scholarly Big Data: AI Perspectives, Challenges and Ideas." held in conjunction with The Association for the Advancement of Artificial Intelligence 2015 (AAAI 2015), 25-26 January 2015, Austin, TX, USA.
- The 1st Workshop on "Computational Scientometrics: Theory and Applications." held in conjunction with the **iConference**, 2013.

Professional Societies Membership:

- Member of American Association for Artificial Intelligence (AAAI)
- Member of the ACM
- Member of IEEE

Department and College Services

Poster Presentations:

- April 2017: Poster presentation at the UNT Scholars Day 2017.
 - Poster Title: "A New Method for Automatically Extracting Keyphrases from Scholarly Articles."
 Presentation by Nathan Contreras.
- March 2014: Poster presentation at the UNT graduate exhibition.
 - Poster Title: "Mapping Moods: Geo-Mapped Sentiment Analysis During Hurricane Sandy." Presentation by Kishore Neppalli.
- March 2014: Two poster presentations at the *Big Data open house* organized by the College of Engineering and the College of Information.
 - Poster Title: "Mapping Moods: Geo-Mapped Sentiment Analysis During Hurricane Sandy." Presentation by Kishore Neppalli and Cornelia Caragea.
 - Poster Title: "Extracting Keyphrases from Research Papers using Citation Networks." Presentation by Cornelia Caragea.

Other College Services:

• Civic Plus and IBM:

 During Fall 2017, I participated in a research meeting with Civic Public in an endeavor to establish collaborations with local industry, as well as in a meeting with IBM representatives from Kansas City meant to identify opportunities for collaborations between IBM and KSU.

• Proctor & Gamble:

 I had a meeting with Dr. David Ben-Arieh to discuss the potential benefits of recommender systems and social media data analysis to companies such as Proctor & Gamble.

• Yahoo Research:

 I have continued my collaboration with Prakhar Biyani who was a research scientist at Yahoo Research, and is currently at Oath Inc., CA, to maintain collaboration with industry.

• American Cancer Society:

- I have also continued my collaboration with the American Cancer Society (ACS) and have started to focus efforts to make an agreement of collaboration between ACS and K-State.

• University of Bucharest:

 During Fall 2017, I put significant efforts in trying to establish a collaboration with University of Bucharest.

• Fort Worth Museum of Science and History:

I also continued to collaborate with the Fort Worth Museum of Science and History. We have made plans to submit a proposal for the museum, as an extensions to the BigData proposal, which was accepted in Summer 2017. I see this collaboration as an excellent outreach activity to reach out to the public and make them aware about research in computer science in general and NLP and crisis-related research in particular.

• K-12 NSF RET:

- During 2017, I also started a collaboration with a K-12 teacher from Texas. We are in the process of submitting a Research Experience for Teachers supplement at NSF.

• Fidelity Visit Day:

I participated in the Fidelity Visit Day (the visit day was organized by Thomas Derryberry). The meeting was held at the Discovery Park, University of North Texas, Denton, TX, on September 27th, 2016. During the meeting I presented highlights of my research on Images' privacy prediction.

• State Farm Day:

I participated in the State Farm Visit at UNT and met with State Farm representatives. I provided details regarding my research groups and the undergraduate students whom I worked with (the visit day was organized by Angus McColl). The meeting was held at the Discovery Park, University of North Texas, Denton, TX, on August 31st, 2016.

• Ericsson-UNT Day:

 I participated in the Ericsson UNT Day to seek opportunity for funding (the visit day was organized by Thomas Derryberry). The meeting was held at the Ericsson location, Plano, TX, on April 8th, 2016.

• Meeting with the President:

I participated in the meeting with the President to present highlights of my research on data science.
 The meeting was held in the CSE Department at the Discovery Park, University of North Texas,
 Denton, TX, on March 25th, 2016.

• Faculty Retreat:

I was invited to participate in a faculty retreat to discuss ways to improve and enhance our research climate at UNT, in order to elevate our scholarly performance across the College of Engineering.
 The meeting was held in Denton, TX, on January 13th, 2016.

Departmental Committees:

- Sept. 2016 May 2017: Part of the Faculty Search Committee at CSE, UNT.
- Sept. 2015 May 2016: Part of the Graduate Studies Committee at CSE, UNT.
- Sept. 2014 May 2015: Part of the Graduate Studies Committee at CSE, UNT.
- Sept. 2013 May 2014: Part of the Faculty Search Committee at CSE, UNT.
- Sept. 2013 May 2014: Part of the Interdisciplinary Information Science PhD program Committee in LIS, UNT.

Other Department Services:

- Hosted the visit of Dr. Sonia Haiduc from Florida State University, Tallahassee, Florida, in the ML group, May 11, 2016.
- Hosted the visit of Dr. Raymond Mooney from the University of Texas at Austin, Austin, Texas, June 26, 2015.
- Co-hosted, together with Dr. William Moen, the visit of Dr. Damir Cavar from the Institute for Language Information and Technology at Eastern Michigan University, February 20, 2014.
- Invited and hosted Dr. Anastasia Krithara from Institute of Informatics and Telecommunications (IIT), NCSR Demokritos, Athens, Greece, December 12, 2013.
- Established a new research laboratory, "Machine Learning Research Group", at the Department of Computer Science and Engineering, University of North Texas, Fall 2013.
- Invited and hosted Dr. C. Lee Giles from Penn State to visit UNT, October 5^{th} , 2012.